17 February 1967

MEMORANIUM FOR: Director, National Fhotographic Interpretation Center

SUBJECT:

Photo Analysis of UFO Photography

l. This memorandum is in response to Project Number 66120-7, submitted by requesting that perform a photo analysis of photographs imaging an alleged UFO (i.e. unidentified flying object).

- 2. The photography for this project-was-supplied by the Aerial Phenomena Office of FTD (TDET/UFO), located at Wright-Patterson AFB, Dayton, Ohio. The photographic package included three photo enlargements of the UFO (attachments 1, 2 and 3) and one photo enlargement of a helicopter (attachment 4). The latter was supposedly taken at approximately the same time and from approximately the same camera station as were the UFO photographs. The image quality of these four prints were less than optimum and were considered poor for mensural and photo analysis. These four enlarged photographs were copies reproduced from a second generation negative and attachments 1 and 2 were supposedly printed full format with an approximate 4"x6" image format. Attachments 3 and 4 are assumed not to be full format and were not used in this photo analysis because of this factor. The original photography was taken with a Polaroid Swinger having an approximate 2"x3" image format. These original prints were not available for the photo analysis. This latter single factor greatly hampered the a tysis and prevented any hopes of establishing meaningful answers.
- 3. Also included in the photographic package were five photographs of the alleged exposure station and surrounding vicinity. These photographs (attachment 5) were taken with a Polaroid Swinger by Major R.W. Nyls of the USAF. He personally investigated the UFO exposure station on the shore of lake St. Clair, Michigan, and tried to duplicate as closely as possible the exact position of the original camera exposure stations. Major Hyls also provided exact measurements of the area and objects imaged in the original UFO

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photographs (attachments 6, 7 and 8). These photographs along with the measurement sketches and investigation report provided a means of obtaining an approximate photographic scale. This scale value was then used to obtain approximate dimensions of the UFO. However, to do this the photo analyst had to first make major assumptions. These assumptions were necessary in a photo analysis of this type where insufficient data is available or in doubt. If any of these assumptions are in error the obtained dimensions are likewise in error.

- 4. The assumptions used in this photo analysis are as follows:
- a. UFO was at a distance of 0.25 miles from camera station when photographed (this information supplied by Major Nyls in his investigation report).
- b. The measurements supplied by Major Nyls are correct as stated.
- c. Photographs-shown in attachment 1 and 2 are full format.
- d. UFO photographed was_circular-with plane_of_tail section perpendicular_to camera axis.
- e. The distance between the camera station and the object was large enough so that adjustments to the camerafocal length need not be considered.
- 5. Attachment 9 represents an artists rough conception of the UFO along with the averaged dimension obtained from the mensural analysis of the photograph shown in attachments 1 and 2. Again, the user of this information must be cautioned that the dimensions shown here are only approximations based on assumptions. The quality of the photography, the crude estimation of the distance from the camera station to the foject, the lack of original prints and precise camera data all tend to invalidate the answers. A good example of how the dimensions could change is illustrated by any change in the distance of the object from the camera station. The dimensions will change in direct proportion as the ratio of any new distance divided by the 0.25 mile distance that was used, i.e. 0.20 mile 10.25 mile = 0.80; therefore, causing the new values to be 80% of the original values.

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6. In conclusion, it should be noted that all of the information contained in this memorandum deals with quantitative or = dimensional information obtained from calculations based upon a large number of assumptions. The qualitative or subjective analysis of the imagery is not treated because of a lack of background knowledge on UFO imagery. This office cannot shed any light on the authenticity of this alleged UFO from this photo analysis. There is no definite evidence that this photography is a hoax. On the other hand, for one_to assume that_this object is a UFO is equally as dangerous. There are too many unanswered questions to label the probable cause of this sighting as anything but undeterminable. For example-the degraded image quality of the helicopter when compared with the UFO is suspect when considered that the helicopter was closer to camera station when photographed. Likewise, the crispness of the edge gradient of the black band on the UFO is good considering the distance at which the object was photographed. Also, the fact-that-the tail section of the UFO was an a photographed in each case with the same cross section exposed casts some suspicion on the authenticity of the UFO ? However, each of the above facts can be explained by various reasons and because of -these reasons the photo analysis of this UFO photograph has resulted in inconclusive answers.



Photo 2 of Attachment 5 to A2____



Photo 1 of Attachment 5 to A2

